

What is claimed is:

1. A piezoceramic actuator (1), substantially comprising a monolithic stack of thin piezoceramic films (2) having internal electrodes (3), arranged between the films, that are electrically interconnected on outer sides of the stack to form at least two electrode groups electrically separated from one another,

wherein the internal electrodes (3) each have rail-like extensions (4) on a region of the outer side of the stack.

2. The actuator as defined in Claim 1, wherein the extensions (4) are formed by electrolytically deposited metal.

3. The actuator as defined in Claim 1 or 2, wherein each rail-like extension (4) is made of a nickel or nickel-alloy layer (4') and an externally adjacent gold layer (4").

4. The actuator as defined in Claim 1 or 2, wherein each rail-like extension (4) is made of copper.

5. The actuator as defined in Claim 1 or 2, wherein each rail-like extension (4) is made of tin-silver alloys.

6. A method for manufacturing a piezoceramic actuator as defined in Claim 1, wherein the extensions (4) are produced electrochemically by the fact that the internal electrodes (3) are connected as the cathode and the monolithic stack is introduced into an electrolytic bath.

7. The method as defined in Claim 6, wherein in order to form the extensions (4), first nickel or nickel alloys and, in a further bath, gold are deposited.

8. The method as defined in Claim 6, wherein in order to form the extensions (4), copper or tin-

silver alloys are deposited.

Add
A17